SONY

4-482-387-41 (1)

TRINITRON® COLOR TV

OPERATING INSTRUCTIONS

Before operating the unit, please read this manual thoroughly and retain it for future reference.

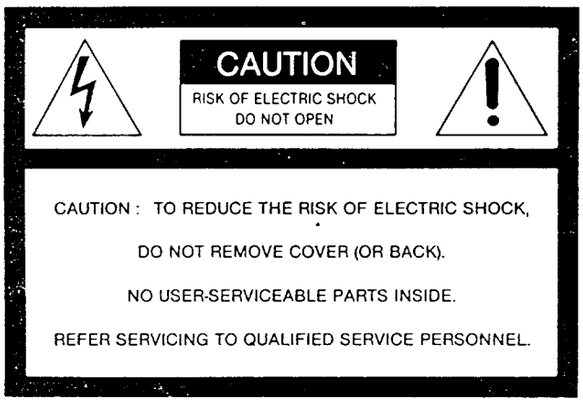
OWNER'S RECORD

The model and serial numbers are located on the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

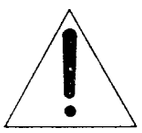
Model No. KV13TR20 Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

PRECAUTIONS

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

Repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

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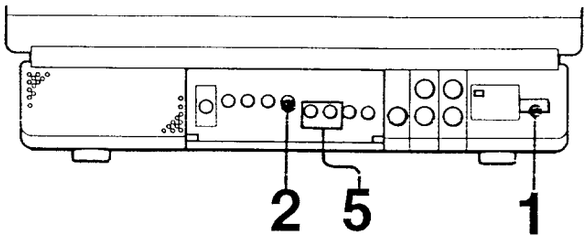
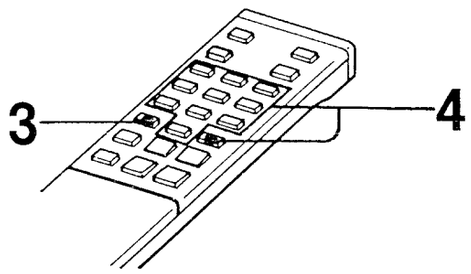
PRESETTING CHANNELS

By adding and erasing channels, you can preset your TV so that only the desired channels appear in sequence when the CH "+" or "–" is pressed.



Receivable channels of your unit are:
VHF: 2–13 UHF: 14–69 CATV: 1–125



PREPARATION

1 POWER

Press POWER on the TV.

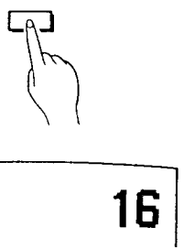
2 OFF ON

CABLE

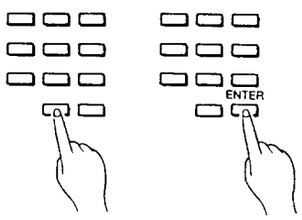
Set the CABLE selector to:
ON for CATV channels
OFF for VHF/UHF channels

ADDING AND ERASING CHANNELS

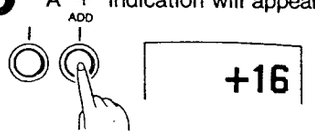
3 Press DISPLAY to make the channel number appear.



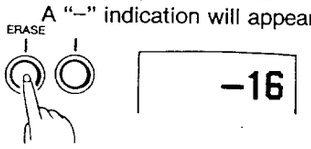
4 Press the number(s) of the channel to be added or erased, then press ENTER.



5 To add, press ADD.
A "+" indication will appear.



To erase, press ERASE.
A "–" indication will appear.



Repeat steps **4** and **5** for other channels to be added or erased. To add erased channels again, repeat the steps in adding.

Note
If you erase a VHF or UHF channel, the cable TV channel with the same number will also be erased, and vice versa.

CABLE TV CHANNEL CHART*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart.

Check with your local cable TV company for more complete information on the available channels.

Number on this TV	1	5	6	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Corresponding CATV channel	A–8	A–7	A–6	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q

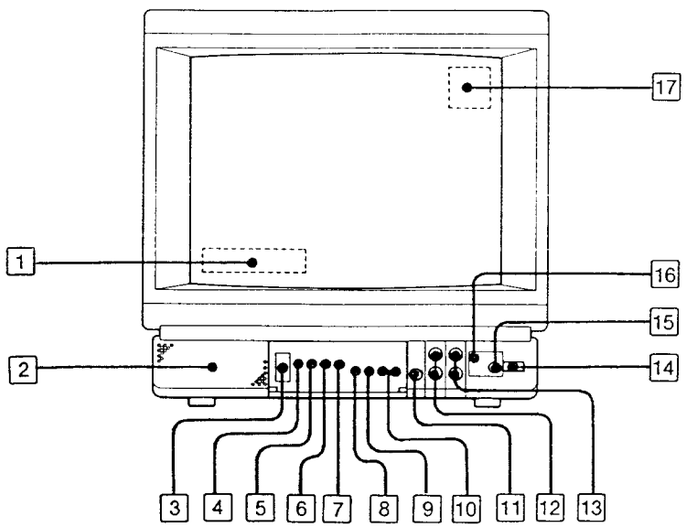
31	32	33	34	35	36	37	38	39	.....	.....	93	94	95	96	97	98	99	100	101	102	.....	.....	123	124	125
R	S	T	U	V	W	W+1	W+2	W+3	.....	.....	W+57	W+58	A–5	A–4	A–3	A–2	A–1	W+59	W+60	W+61	.....	.....	W+82	W+83	W+84

*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Note
Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) in addition to the normal cable connection.

LOCATION AND FUNCTION OF CONTROLS

Front



1 **Bar display**
Indicates level of volume and picture contrast.

2 **Speaker**

3 **Earphone jack (minijack)**

4 **BRIGHT (brightness) control**
Turn clockwise for more brightness or counterclockwise for less.

5 **COLOR control**
Turn clockwise for more color intensity or counterclockwise for less.

6 **HUE control**
Turn clockwise to make the tones greenish or counterclockwise to make them purplish.

7 **CABLE selector**
To view CATV programs, set this selector to ON.

8 **ERASE button**
Used for channel presetting. Press to erase channels.

9 **ADD button**
Used for channel presetting. Press to add channels.

10 **PICTURE buttons**
Press PICTURE "+" to increase picture contrast, or "–" to decrease it.

11 **TV/VIDEO button**
Press to view the picture from the connected VCR.

12 **VOLUME buttons**
Press VOL "+" to increase volume, or "–" to decrease it.

13 **CHANNEL scan buttons**
Press "+" for higher-numbered channels and "–" for lower-numbered channels.

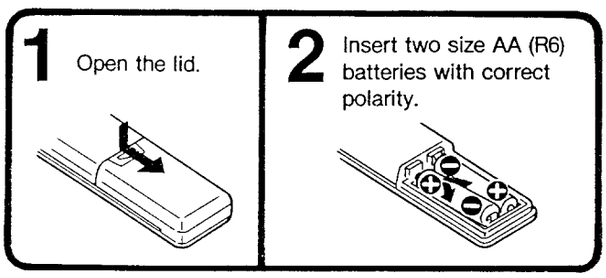
14 **POWER switch**
Press to turn the unit on.

15 **Remote control detector**
Point the Remote Commander towards this detector.

16 **SLEEP lamp**
Lights up when the SLEEP button on the Remote Commander is pressed.

17 **On-screen display**
Shows channel numbers, "MUTING", and "SLEEP" indications.

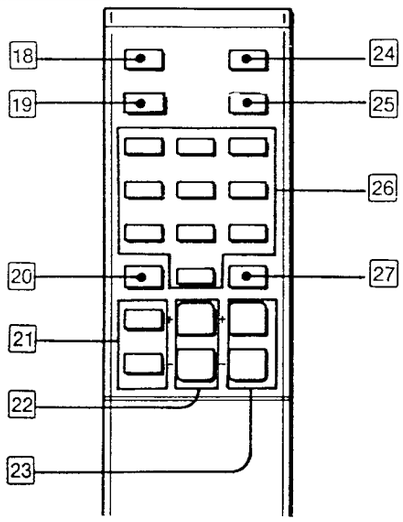
BATTERY INSERTION



Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.
- If a Remote Commander not recommended is used to operate this TV, or if the supplied Remote Commander is used to operate another TV, the TV may not operate properly.

Remote Commander RM-729



18 MUTING button
Press to mute the sound immediately.
The "MUTING" display will appear and remain on the screen. Press it again or press VOLUME "+" to restore the sound.

19 TV/VIDEO button**

20 DISPLAY button
Press to make the channel number appear on the screen.

21 PICTURE buttons**

22 VOLUME buttons**

23 CH (channel) scan buttons**

24 POWER switch
Once the unit is turned on with the POWER switch on the TV, press to turn the unit off (standby mode). Press again to turn it on.

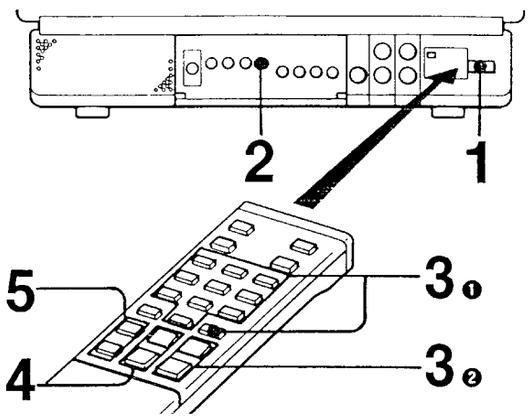
25 SLEEP button
Press to have the unit turn off automatically after one hour. The "SLEEP" display will appear on the screen a few seconds and the SLEEP lamp on the TV will remain lit for one hour.
To cancel the sleep timer, press again so that the "SLEEP" display disappears, or turn off the TV.

26 Channel number buttons
Used to select channels.

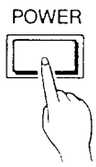
27 ENTER button
Used to select channels.

**The functions of these buttons are duplicated on the TV.

OPERATION



1 Press POWER on the TV.

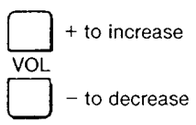


2

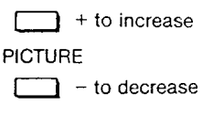
Set the CABLE selector to:
ON for CATV channels
OFF for VHF/UHF channels

3 Select the desired channel in one of the following two ways.
❶ Press the number(s) of the channel. Then press ENTER.
❷ To select channels already preset, press CH "+" for higher-numbered channels or "–" for lower numbered channels.

4 Adjust VOLUME.



5 Adjust picture contrast.

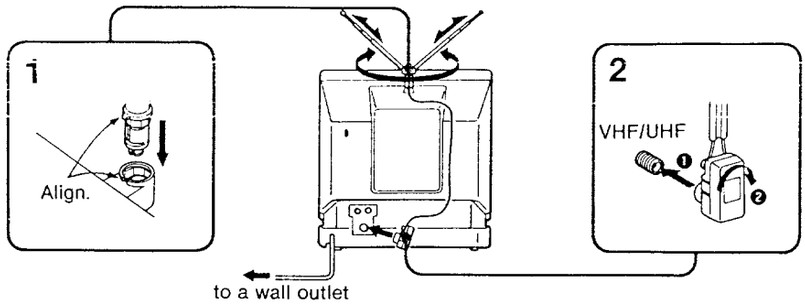


ANTENNA/CABLE CONNECTION

INDOOR ANTENNA ADJUSTMENT

For VHF/UHF reception, use the supplied telescopic dipole antenna.

Adjust the length, direction and angle of both elements symmetrically until the picture is clear.



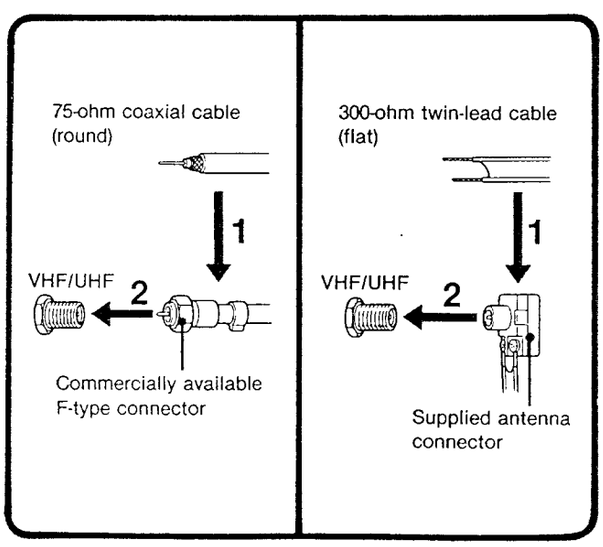
OUTDOOR ANTENNA CONNECTION

If you cannot obtain satisfactory reception with the dipole antenna, use an outdoor antenna.
Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

1 Remove the indoor antenna from the antenna terminal of the TV.
2 Prepare the antenna or cable end using the appropriate connector, and connect the antenna or cable to the antenna terminal of the TV. (See **A** or **B** below.)

A To connect a VHF antenna, UHF antenna, VHF/UHF combination antenna,* or CATV cable

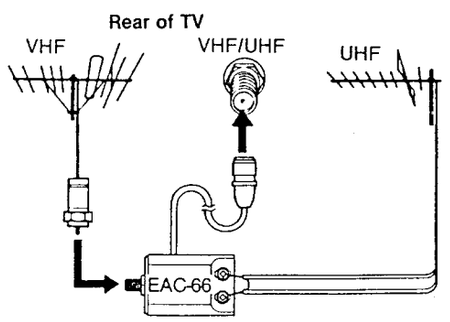
1 Check the cable type and attach the appropriate connector to the antenna end.
2 Plug the connector into the VHF/UHF antenna terminal on the rear of the unit.



*Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.

B To connect both VHF and UHF antennas

Prepare the VHF antenna end using the appropriate connector as illustrated in **A**.
Attach an optional EAC-66 U/V mixer to the TV antenna terminal, and connect the cables to the U/V mixer.



Note
When viewing CATV, connect the cable directly to the terminal. If you use the U/V mixer, snow and noise may appear in the pictures of the channels over 37 (W + 1).

Note to CATV system installer in the U.S.A.
This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

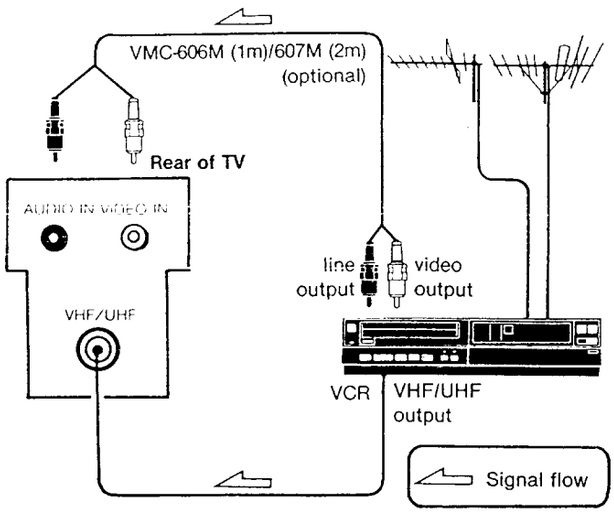
VCR CONNECTION

With this connection, you don't have to select channel 3 or 4 to view VCR playback.

Preparations

1 Turn on the TV.
2 Press the TV/VIDEO button so that the "VIDEO" indication appears on the screen.

For operation, refer to the instruction manual furnished with the VCR.

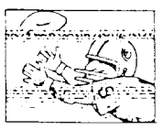
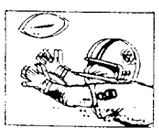


SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF: channels 2–13
	UHF: channels 14–69
	Cable TV channels 1–125
Picture tube	Trinitron tube
	13-inch picture measured diagonally
	14-inch picture tube measured diagonally
	90-degree deflection
Inputs video	1V p-p, 75 ohms unbalanced, sync. negative
audio	408 mV rms (100% modulation, 47 kilohms)
Output	Earphone jack (minijack)
Power requirements	120 V AC, 60 Hz
Power consumption	97 W
Accessories supplied	
	VHF/UHF telescopic dipole antenna (1)
	Antenna connector (1)
	Remote Commander RM-729 with 2 size AA batteries
Optional accessories	U/V mixer EAC-66
	Connecting cables VMC-606M/607M etc.

Design and specifications are subject to change without notice.

TROUBLESHOOTING

SYMPTOM	CHECK AND ADJUST
Poor or no picture (screen not lit)	• Adjust PICTURE. • Adjust BRIGHT. • Re-orient antenna. Check antenna/cable connections.
No sound	• Press VOLUME +. • Release MUTING on the Remote Commander.
No picture (screen not lit), no sound	Is POWER switched on? Power in outlet?
Snow and noise only	• Is it an active or the correct channel? • Check the CABLE selector setting. • Check antenna connections.
 **Dotted lines or stripes**	This is often caused by local interference (e.g. cars, neon signs, hair-dryers etc.). Adjust antenna for minimum interference.
 **Double images or ghosts**	Reflections of TV waves from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.
Try another channel. It could be station trouble.	

If the problem still cannot be solved, contact your nearest service facility.

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